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ABSTRACT

This paper examines the decline in occupational segregation between black and white women over the twentieth century and analyzes how shifts in the occupational structure of the economy and changes in the racial composition of occupational categories contributed to this change. Overall, findings show that the decrease in occupational segregation between black and white women is a result of (1) decreasing demand in highly segregated "black women's occupations," especially agricultural labor and household work; (2) increasing supply of better educated black female workers; and (3) increasing equality of opportunity, particularly in the decade from 1960 to 1970. Thus, both market forces and changes in employers' hiring practices have contributed to the convergence in occupations between black and white women. (Author/GC)

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THE DECLINE IN OCCUPATIONAL SEGREGATION BETWEEN BLACK AND WHITE WOMEN

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Paper to be presented at the Annual Meetings of the American Sociological Association, September 6, 1982 in San Francisco, California.

The Decline in Occupational Segregation Between Black and White Women

By

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The paper examines the change in occupational segregation between black and white women over the twentieth century and analyzes how shifts in the occupational structure of the economy and changes in the racial composition of occupational categories contributed to this change.

Occupational segregation is measured by the index of dissimilarity on detailed occupational data reported in U.S. Censuses 1910 to 1970. An occupational classification system comparable over this time period was developed based on the 1950 Census Bureau classification. The effect of shifts in the occupational structure is measured by the change in the segregation index that would have occurred if the racial composition within each occupation remained constant and the only source of change in the indexes between years were due to changes in the size of occupational categories. The effect of change in racial composition within occupational categories is measured by the change in the segregation index that would have occurred if the size of each occupation had remained fixed at its initial level and the only source of variation in the indexes between years were due to changes in the racial composition within occupations.

There has been a substantial decrease in occupational segregation between black and white women over this century. In 1910, nearly two in every three employed black women would have had to change jobs to equal the occupational distribution of white women. By 1970, this figure had declined to somewhat over one in three. Changes in occupational structure worked to reduce segregation throughout the 1910 to 1970 period. The primary changes were the long-run decline in two staples of black women's employment -- agricultural labor and private household work. Racial mix within occupations increased segregation up to 1950 as white women moved into clerical and sales work. After 1950, particularly in the 1960 to 1970 decade, black women increasingly worked in what had been white women's jobs. Excess demand for educated black women contributed to this trend. The timing of black women's increased entrance into white women's jobs predates the enforcement of Equal Employment Opportunity legislation but coincides with changes in social attitudes supporting equality of opportunity. Overall, the findings show that the decrease in occupational segregation between black and white women is a result of (1) decreasing demand in several highly segregated "black women's occupations", (2) increasing supply of better-educated black women workers, and (3) increasing equality of opportunity, particularly in the 1960 to 1970 decade. Thus, market forces have significantly contributed to the convergence in occupations of black and white women but changes in employers' hiring practices in the 1960 to 1970 decade were also important in decreasing segregation.

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The analysis shows that changes in the occupational structure worked to reduce segregation throughout the 1910 to 1970 period. The primary changes were the long-run decline in two staples of black women's employment -- agricultural labor and private household work. Racial mix within occupations increased segregation up to 1950 as white women moved into clerical and sales work. After 1950, particularly in the 1960 to 1970 decade, black women increasingly worked in what had been white women's jobs. Excess demand for educated women workers and a substantial increase in the supply of educated black women contributed to this trend. The timing of black women's increased entrance into white women's jobs predates the enforcement of Equal Employment Opportunity legislation but coincides with changes in social attitudes supporting equality of opportunity.

Overall, the findings show that the decrease in occupational segregation between black and white women is a result of several factors: (1) decreasing demand in several highly segregated "black women's occupations", (2) increasing supply of better-educated black women workers, and (3) increasing equality of opportunity, particularly in the 1960 to 1970 decade. Thus, market forces have significantly contributed to the convergence in occupations of black and white women but changes in employers' hiring practices in the 1960 to 1970 decade were also important in decreasing segregation.

Trends in occupational segregation. There has been a substantial decrease in occupational segregation between black and white women over this century, as measured by the index of dissimilarity[1] on detailed occupation-

[1] The index of dissimilarity, $D=1/2$ the sum of the absolute values of $B_i/B - W_i/W$ where B_i and W_i are the number of employed women respectively of two racial groups, in occupation i, and B and W are the total number of employed women of the two racial groups. The proportion in each occupational category of employed women in each racial group are computed and the positive and negative differences in the proportions of the two groups in each category are summed.

al data.[2] The index is a summary measure of the overall differences in the occupational distributions of black and white women and may be interpreted as the percentage of black women who would have to change occupations in order for them to have the identical occupational distribution as white women. (See Duncan and Duncan, 1955, for fuller treatment and computing procedures.) Nearly two in every three (63 percent) employed black women would have had to change jobs to equal the occupational distribution of white women in 1910, compared to somewhat over one in every three (38 percent) in 1970 (see Table 1). The decline was not uniform. Racial segregation in blue collar and farm work declined throughout the period and can alone account for the total 25 point decline in occupational segregation between black and white women from 1910 to 1970. Counteracting this decline was the increase in segregation in white collar and service work up to 1950. Overall, occupational segregation increased during the first few decades of the century, peaked prior to the second World War, and declined thereafter. Over 60 percent of the decline in occupational segregation between black and white women 1910 to 1970 occurred in the last decade.

(Table 1 About Here)

We can decompose the observed changes in the index of segregation into two sources -- (1) changes due to shifts in the occupation mix of the economy, and (2) changes due to shifts in race composition within occupations

[2]The data are the distribution by detailed occupation of employed women by race reported in the U.S. Censuses of 1910, 1930, 1950, 1960 and 1970 (U.S. Bureau of the Census, 1933; 1943; 1956; 1963; 1973). The occupational classification systems used at each of these censuses are not directly comparable. The 1910 classification listed detailed occupations grouped into eight industrial divisions. This system was followed with no material changes in 1920 and 1930. In 1940, a new classification arranged occupations into eleven major occupational groups with regard to industrial sector (U.S. Bureau of the Census, 1943). The 1940 classification system was followed in the 1950 and 1960 censuses with relatively minor changes (U.S. Bureau of the Census, 1968). The 1970 system is closely related to the systems used since 1940 but a number of significant changes were introduced which increased detail and added a new major group, transport equipment operatives (U.S. Bureau of the Census, 1972). In addition, the age and employment status of persons included in the universe changed over the period. Prior to 1940 the universe covered is civilian gainful workers 10 years old and over; for 1940 and after it refers to the experienced civilian labor force (all employed and unemployed workers with previous work experience) 14 years old and over. (See U.S. Bureau of the Census, 1943 and 1975 for a discussion of the differences.) To achieve comparability over time, a single classification scheme was developed using the 1950 Census Bureau occupational classification system (Kaplan and Casey, 1958). Some of the categories of that system had to be aggregated because in earlier census years data on occupations were less detailed. Thus, for example, actors, athletes, dancers, entertainers, and sports officials, listed separately in 1950 and after, were classified as one occupational group, as available in earlier censuses. The final list provided 292 occupational categories for which comparable data could be derived from 1910 to 1970. The 1900 data were not sufficiently detailed to be included.

(Fuchs, 1975).[3] The mix effect may be viewed as the change in the segregation index that would have occurred if the racial composition within each occupation had remained constant so that the only source of change in the indexes between two years would be due to changes in the size of occupational categories. The composition effect may be regarded as the change in the index that would have occurred if the size of each occupation had remained fixed at its initial level so that the only source of variation in the indexes between two years would be due to changes in the racial composition within occupations (Blau and Hendricks, 1979). Because we used initial years weights, alternately fixing the occupation mix and the race composition at time 1, the mix and composition effects do not necessarily sum to the total difference in the index between two years. A residual remains that may be interpreted as due to an interaction between changes in race composition and employment mix over the period (see Blau and Hendricks, 1979, for fuller treatment and computing procedures).

The relative importance of shifts in the occupational mix of the economy and in racial composition within occupations in accounting for the observed

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[3] If B_{it} = the number of black females in occupation i in year t, W_{it} = the number of white females in occupation i in year t, $T_{it} = B_{it} + W_{it}$ = total female employment in occupation i in year t, the index of dissimilarity can be written:

$$(1) \quad D_t = 1/2 \sum_i \left| \frac{q_{it} T_{it}}{\sum_i q_{it} T_{it}} - \frac{p_{it} T_{it}}{\sum_i p_{it} T_{it}} \right|$$

where $p_{it} = B_{it}/W_{it}$ and $q_{it} = (1-p_{it}) = W_{it}/T_{it}$

The effects of occupational mix and race composition on the change in segregation index between any two years may be represented by:

$$(2) \quad MIX = 1/2 \left[\sum_i \left| \frac{qi1 T_{i2}}{\sum_i qi1 T_{i2}} \; \frac{pi1 T_{i2}}{\sum_i pi1 T_{i2}} \right| - \sum_i \left| \frac{qi1 T_{i1}}{\sum_i qi1 T_{i1}} \; \frac{pi1 T_{i1}}{\sum_i pi1 T_{i1}} \right| \right]$$

$$(3) \quad COMP = 1/2 \left[\sum_i \left| \frac{qi2 T_{i1}}{\sum_i qi2 T_{i1}} - \frac{pi2 T_{i1}}{\sum_i pi2 T_{i1}} \right| - \sum_i \left| \frac{qi1 T_{i1}}{\sum_i qi1 T_{i1}} - \frac{pi1 T_{i1}}{\sum_i pi1 T_{i1}} \right| \right]$$

changes in the index of segregation is estimated in Table 2.[4] As can be seen, the small change in occupational segregation between 1910 and 1930 is the result of mix and interaction effects counteracting composition effects. Changes in occupational structure led to a small decline in occupational segregation (-3%), while segregation within occupations increased (+8%). During the 1930 to 1950 period, mix and composition effects again were counteracting. Changes in the occupational structure worked to decrease occupational segregation between black and white women by 10 percent, but increasing segregation within occupations increased occupational segregation by a similar amount. The interaction of these factors led to a reduction in the overall rate of segregation. In the next 20 year period, both mix and composition effects worked to reduce occupational segregation, and within-occupation segregation accounted for more of the decline than changes in occupational structure. Thus over the 60 year period, changes in the occupational structure consistently worked to reduce segregation and were more important than decreasing segregation within occupations in accounting for the overall decline in occupational segregation between black and white women. Racial segregation within occupations actually increased up to 1950 but sizeable decreases occurring after 1950, especially in the 1960 to 1970 decade, account for the recent convergence in the occupational distributions of black and white women.

(Table 2 About Here)

Changes in occupational structure - the mix effects. To better understand the factors producing these mix and composition effects, we calculated the distribution in each census year of employed white women, black women, and all women according to racial composition of the occupational category in 1910 (see Table 3). Jobs in which black women constituted 40 percent or more of the incumbents in 1910 are considered black occupations and those in which white women constituted 95 percent or more of the incumbents in 1910 are considered white occupations. Between 1910 and 1970 there was a decline in the proportion of the female work force in predominately black occupations from 40 percent of employed women to less than 5 percent. Counterbalancing this decrease in highly-segregated, black occupations was a growth over the period in the relative

[4] These calculations are based on 10 broad rather than 292 detailed occupational categories. The aim was to measure the relative importance of shifts in the occupational mix of the economy and racial composition within occupations, so using detailed categories was not warranted. Indexes calculated on broad categories are lower than those calculated on detailed groups and mask occupational segregation between black and white women within occupational groups. In 1910 the index of dissimilarity calculated on broad occupational categories was 61.8 compared to 62.7 when calculated on detailed occupations, in 1930 it was 61.4 compared to 66.6, in 1950 it was 53.0 compared to 60.8, in 1960 it was 47.3 compared to 53.2, and in 1970 it was 29.3 compared to 37.9. The general trends of decreasing occupational segregation between black and white women using the broad and detailed categories are similar, but indexes based on the broad categories mask the increase in segregation from 1910 to 1930 found using detailed categories and over-estimate the reduction in segregation over the entire period.

size of predominantly white occupations, from just under 50 percent of the work force to 75 percent. The decrease in highly segregated black occupations outweighed the increase in highly segregated white occupations and thus changes in occupational structure over the 1910-to-1970 period contributed to an overall decline in occupational segregation between black and white women.

(Table 3 About Here)

The decrease in occupational segregation attributable to changes in the occupational structure of the economy is primarily related to the long-run decline in importance of two staples of black women's employment: agricultural labor and private household work. Declining demand is the major factor accounting for the decline in importance of agricultural labor. Demand for farm labor, as measured by the number of employed workers in that occupation, peaked in 1910 with over 5 million workers and nearly 15 percent of the total labor force. By 1950 the number of farm workers had decreased by half and composed less than 5 percent of the labor force (Kaplan and Casey, 1958). Black women's involvement in farm labor declined even more dramatically, from 37 percent of all those employed in 1910 to 8 percent in 1950. Farm mechanization, by decreasing the relative profitability of small farms, led to a greater decline in family-farm workers than other farm laborers and black women were more likely than other farm laborers to be working on small family farms. The different involvement of black and white women in farm labor accounted for 25 percent of their occupational segregation in 1910 (see Table 1). By 1950 this category accounted for only one percent of the occupational segregation between black and white women.

The other staple of black women's employment was private household work. In 1910 nearly half of all employed black women worked in this sector, but at that time it was also an important occupation for white women, although not nearly as important as it was for black women. The demand for private household workers, as measured by the number of employed, continued to increase through 1940 (Kaplan and Casey, 1958) and remained the most important occupation for black women through 1960 when 40 percent of black women workers were employed in private households. During this period white women's involvement steadily declined so that occupational segregation between black and white women in this sector increased and was greater in 1960 than it had been in 1910 (see Table 1). By 1979, however, the proportion of black women employed as private household workers had dropped to 8 percent. This sector, while still an important source of occupational segregation between black and white women, experienced the greatest decline in segregation of any occupational category during the 1960 to 1970 decade and likely did again in the 1970 to 1980 decade.

The decline in private household workers is not explained by low or declining demand. From 1940 to 1950 when the number of private household workers decreased by over one-third, there was a rise in wages paid to domestic service workers relative to all other workers (Stigler, 1956:101). During the 1950 to 1960 decade the number of private household workers increased, but during the following decade the number again declined by over one-third.

Bell found during this period that "on a hourly basis, domestics were earning more than many office workers" (1974:474). Further, the increased educational attainment and labor force participation rates of wives during the 1940 to 1979 period encouraged the substitution of hired domestic service for self-service (Finegan, 1975; Mincer, 1963; Bowen and Finegan, 1969). Demand factors thus predict an increase in domestic service.

The decline in private household workers, and particularly of black household workers, is more likely caused by supply than demand factors (Cain, 1966:88). Several factors have operated to decrease the supply of black women in domestic service. Some of the decline in supply of black women household workers is the result of increased schooling qualifying black women for better jobs. Household work requires little education and historically household workers have been drawn from those with the least education. In 1940, most private household workers had 8 or less years education and three-quarters (74%) of black women in the experienced civilian labor force fell into this low education category. By 1970, with the general increase in schooling of the population, the educational attainment of the typical household worker was also upgraded with most having some high school but less than a high school degree. The pool of less-educated black women workers, however, was shrinking. In 1970, only 25 percent of black women in the experienced civilian labor force had 8 or less years education, and just over 50 percent had less than a high school education. The decline from 74 percent of black women workers in the low education pool in 1940 to 52 percent in 1970 would account for an estimated loss of 222,700 black women household workers or 15 percent of the decline. The decline in availability of less-educated black women workers, especially among the young who had greater access to increased educational opportunities, is also consistent with the increase in the median age of women household workers from 33.9 years in 1940 to 49.6 years in 1970 (U.S. Bureau of the Census, 1943b: Table ; 1973: Table 226).

Another source of the decline was the shift from private household work to other service occupations. Black women increased their involvement in commercial service work from 11 percent in 1940 to 26 percent in 1970. This shift was more a transfer in location of work from private homes to commercial establishments than an upgrading or real change in type of work. But it was preferable in several respects: commercial service work is more likely full-time and year-round, it is more likely to include social security and other benefits, and while hourly wage rates may be similar, yearly earnings on the average far exceed those of private household workers. Perhaps more important, commercial service work is perceived as less demeaning than working as private servants in (white) homes (Bell, 1974:474). If we estimate the demand for women commercial service workers as the proportion of all women in the experienced civilian labor force in these occupations, the proportion of black women in commercial service work outpaced the proportion of all women workers by nearly 9 percent. Based on this estimate, about 22 percent of the decline of black women in private household work can be accounted for by the shift from private to commercial service work.

A third cause of the declining supply of black women in private household work is the decline in labor force participation of some groups of black women. Traditionally, a higher proportion of black than white women have worked

(Bancroft, 1958:30-33). At the turn of the century, for example, 17 percent of white women 14 years of age and older were in the labor force compared to 41 percent of black women. The higher proportion of black women who work outside the home is related to their poorer economic circumstances. As blacks have on the average lower paying jobs than whites, black families have had to more often rely on more than one worker to meet family economic needs (Bancroft, 1958:30). Thus black women who are divorced, separated, or widowed, have traditionally been more likely to work than white women in these marital status categories. Black women are less likely than white women to receive child support and alimony payments (U.S. Bureau of the Census, 1981), and since black families have fewer assets than white families, black widows must rely more often on their own income to meet financial needs.

Over the twentieth century the labor force participation rates of black and white women have converged. Between 1940 and 1979 the proportion of both black and white women at work increased, but the increase was much greater for white than black women. In 1940, 37 percent of black women were in the labor force compared to 25 percent of white women. By 1979, 53 percent of black women were in the labor force compared to 50 percent of white women. Farley (1977) finds that, when differences in the age composition of the two groups are controlled, the labor force participation rates are now slightly higher for white than for black women.

The cause of this convergence in proportion of black and white women working outside the home can be analyzed by looking at the several different trends in labor force participation by marital status. In all marital status groups, the labor force participation rates of black women declined relative to those of white women. Notable in the context of rapidly rising labor force participation of all women, however, was the absolute decline in labor force participation of black women in the "other marital status" category -- those widowed, divorced, and separated. Both black and white widows showed a decline in labor force participation during the 1960 to 1979 period, but the decline was much greater for black than white women. Black and white divorced women had different labor force participation trends. White divorced women increased their participation from 71 percent in 1960 to 75 percent in 1979 while black divorced women decreased their participation slightly from 70 to 67 percent. The gap in labor force participation rates of black and white women who were separated completely disappeared during the period.

The decline in labor force participation rates of black women in these other marital status categories occurred mainly among those 20 to 44 years of age, those most likely to have dependent children. White women in these age and marital status groups, on the other hand, increased their labor force participation rates. Durbin, finding similar trends for New York City (1975), argues that women at the higher end of the income scale (more often white) enter the labor market when their families split up. Higher incomes make it possible for these families to afford the maintenance of separate households. But low-wage, low-skill workers (more often black) are more likely to drop out of the labor force when the welfare alternatives improves as it did during the 1960's and 1970's. Thus, the relative and, in some cases, absolute decline in

labor force participation of some groups of black women is in part the result of unskilled women with a substitute for income dropping out of the labor market. Many of these women would have been employed as domestics in the past.

Changes within occupations - the composition effects. The data in Table 3 also shed light on the relative importance of shifts in the occupational distribution of black and white women in producing changes in average racial composition within occupational categories. From 1910 to 1950 both black and white women entered white women's occupations, but white women entered these jobs at a faster pace than black women, thus increasing segregation within occupations. Further, black women's relative concentration in black jobs also increased during the 1910 to 1950 period as white women left these jobs earlier and at a faster pace than black women. As a result, changes in average racial composition within occupations between 1910 and 1950 increased the overall degree of segregation.

From 1950 to 1970 both black and white women left black occupations, but the exodus of black women was greater. White women had already left these jobs in such sizeable numbers that by 1950 few remained. Thus, segregation within black occupations decreased substantially during the 1950 to 1970 period, especially in the last decade. At the same time, both black and white women continued to enter white women's occupations but black women did so at a much faster pace than white women, doubling the proportion in these jobs between 1950 and 1970 with most of the increase occurring in the 1960 to 1970 decade. This led to a substantial decrease in racial segregation within white women's jobs. Thus changes in average racial composition within both white and black women's jobs decreased the overall degree of segregation between 1950 and 1970.

The most significant decrease in segregation within white women's occupations occurred in clerical work, one of the fastest growing occupations for women during the period. Over 40 percent of the growth in the female labor force between 1940 and 1970 occurred in clerical work. The decline of racial segregation in clerical work is attributable to several factors. First, the demand for clerical workers exceeded the supply of qualified white women workers. Secondly, black women in the labor force who had the educational qualifications for clerical work increased substantially both in absolute terms and relative to white women. Third, opportunities increased for black women workers to enter previously proscribed occupations. This may have been due to specific government policies, particularly Equal Employment Opportunity legislation, as well as a more general lessening of racial discrimination. We now examine each of these factors in more detail.

During the post World War II period there has been a growing demand for women workers, and especially educated women workers to fill white collar occupations. White collar occupations, particularly clerical and professional occupations, grew faster than other employment sectors during the period (Oppenheimer, 1970:184). Since these occupations generally demand workers with at least four years of high school, we will estimate the demand for educated women workers as the number of employed women in professional and clerical occupations who have completed at least four years of high school. This underestimates demand as it ignores other specific occupations that also require

educated workers. The demand for educated women workers increased from slightly over 3 million workers in 1940 to nearly 13 million in 1970. The number of clerical workers alone with 4 years of high school or more grew from 1 3/4 million in 1940 to 8 1/2 million in 1970.

On the supply side, Oppenheimer (1970) has shown that employers in the past strongly preferred younger unmarried women and that these attitudes and related hiring practices only changed after World War II as demand for women workers greatly outpaced the supply of this typical pool of women workers. In addition to these age and marital status preferences, it is clear from the historical data presented here that, clerical and most professional occupations for women were reserved to white women prior to World War II. Following Oppenheimer's analysis we can construct several potential pools of educated women workers based on these preferences: (1) single, widowed, divorced, and married (husband absent) white women who were 18 to 34 years old, (2) white women in the same marital status categories who were in the broader 18 to 64 age group, (3) white women 18 to 34 including in addition to the women listed above, married women without pre-school-age children, and (4) white women 18-64 including married women without pre-school-age children. In addition, four parallel pools can be constructed that include non-white as well as white women.

Table 4 summarizes the supply of women workers in each of these pools relative to the demand for educated women workers over the 1940 to 1970 period. In 1940 the supply of educated women workers in the pool most preferred by employers -- young, unmarried white women -- exceeded the demand. Thus, there was no pressure from demand for employers to hire nontraditional workers. By 1950, however, demand had outstripped the supply of preferred workers and was barely matched by the larger pool of white women workers in the broader age group 18 to 64. By 1960 even that larger pool was insufficient to match the demand. Demand again substantially increased in the 1960 to 1970 decade, but the supply of educated women also grew. There was a slight decrease in the still sizeable gap between supply and demand.

(Table 4 About Here)

It is clear from these data that there was a substantial shortage of preferred and qualified workers relative to demand during the post World War II period. As Oppenheimer had established, this shortage created job opportunities that drew older married women into the labor force and decreased discriminatory hiring policies directed at married or older women. It also seems likely that this same shortage made qualified black women workers a potential pool that employers could no longer afford to ignore. In fact, public opinion has more strongly supported equal employment opportunities for blacks than employment of married women who have husbands (Burstein, 1979:377).

During this period of rising demand for educated women workers, black women's educational attainment increased more rapidly than that of white women, narrowing the gap in the education of white and black women workers. In 1940, less than 15 percent of employed black women had completed four years of high school or more, compared to nearly 50 percent of employed white women (see Table 5). By 1970, nearly 50 percent of employed black

women had completed at least four years of high school compared to close to 70 percent of employed white women. Thus the difference in proportion of black and white women workers with 12 years of schooling or more declined by nearly one-half over the 1940 to 1970 period, with the greatest gains for blacks relative to whites occurring in the 1950 to 1960 decade. The relative increase in supply of educated black women workers compared to the supply of educated white women workers accounts in part for the increasing proportion of black women in these previously white women's jobs.

(Table 5 About Here)

In addition, black women were able to translate these increased educational qualifications into employment in preferred occupations at a greater rate than in the past. In 1940, only 35 percent of employed black women with four years of high school or more held clerical and professional occupations compared to 65 percent of educated white women. By 1970 this gap had narrowed considerably: 54 percent of educated black women workers were employed in clerical or professional positions compared to 67 percent of white women. The greatest gains in relative opportunity for educated black women occurred in the 1960 to 1970 decade when the difference in the rates at which qualified black and white women were employed in these preferred occupations decreased by half.

What accounts for the improvement in job opportunities for educated black women workers in the 1960 to 1970 period, a decade after the major increase in availability of educated black women workers and the peak in demand for educated women workers relative to supply? Federal Equal Employment Opportunity (EEO) legislation, particularly Title VII of the Civil Rights Act which prohibited discriminatory employment practices, would be expected to have this effect. The law went into effect in 1965, and although race discrimination preceeded sex discrimination as an object of concern, enforcement activity was relatively minor in the late sixties (Burstein, 1979:380). Appropriations, activities, charges, and cases increased only slowly until 1972 when the law was strengthened. Most studies have found that EEO legislation had only a trivial effect on minority employment during the late 1960's (Smith and Welch, 1977).

However, the legislation might be expected to have an immediate, or at least an earlier, effect on employment in government itself. Table 6 examines whether increased government employment of black women in clerical work accounts for the increase in opportunity for educated black women to enter preferred occupations during the 1960 to 1970 decade. The data show that the number of clerical workers employed by government grew substantially from 1940 to 1970, from approximately 325,000 or 3 percent of all clerical workers in 1940 to over 2 million or 20 percent of clerical workers in 1970. Throughout this period black women were at least twice as likely to be employed by government as white women with approximately 40 percent of black clerical workers employed by government from 1950 on. The proportion of all clerical workers employed by government increased during the 1940 to 1970 period, but for black women the increase came in the 1940 to 1950 decade, prior to EEO legislation. In contrast, the proportion of all black women workers employed by government

showed sizeable gains in the 1960 to 1970 decade, increasing from 14 percent to 24 percent in the ten years. While EEO legislation may have increased the proportion of all black women workers employed by government and government is a major employer of black women clerical workers, government employment does not directly account for the increased employment of educated black women in clerical work in the 1960's.

(Table 6 About Here)

While legal changes may not directly account for the increased employment opportunity of educated black women, the law may reflect as well as encourage attitude changes which would have lessened employers taste for discrimination. Burstein (1979) finds that public opinion has increasingly favored equal employment opportunities for blacks since the late 1940's. Attitudes on the labor force participation of women have also become more favorable, although they lag behind those supporting equal opportunity for blacks. Furthermore, as Lloyd and Niemi point out (1979:307), if nothing else the EEO programs heightened women's consciousness about employment opportunities and encouraged pursuit of careers in non-traditional fields. The timing of these attitude changes is consistent with the changes in rate of employment of black women in preferred occupations.

Summary and Conclusions. Changes in occupational structure were more important than decreasing segregation within occupations in accounting for the overall decline in occupational segregation between black and white women. The major changes in the occupational structure that contributed to lessening the segregation between black and white women were the decline in two staples of black women's employment: agricultural labor and private household work. The decline of black women in agricultural labor resulted from a decline in demand. The decline of black women in private household work, on the other hand, appears to be the result of a decline in supply. Several factors contributed to the decline in supply of black household workers: increased schooling qualifying black women for better jobs, the shift from private household work to other service occupations, and a decline in the labor force participation of some groups of black women.

Segregation between black and white women within occupations declined substantially during the 1950 to 1970 period due to both a faster exodus of black than white women from traditionally black occupations and, more importantly, a faster influx of black than white women into traditionally white occupations. The most significant decrease in segregation within white women's occupations occurred in clerical work. The rising demand for educated women workers and the increased supply of educated black women workers account in part for the decreasing segregation in clerical work. In addition, black women were able to translate their increased educational qualifications into employment in preferred occupations at a greater rate than in the past. The improvement in job opportunities for educated black women workers predates the effect of EEO legislation and is not accounted for by increased government employment of black women in clerical work.

Supply and demand changes were major factors decreasing black women's

concentration in agricultural and household labor and increasing the employment of educated black women in preferred clerical and professional occupations in the post World War II period. But market forces were not sufficient to establish equality of opportunity. Qualified black women still lag behind white women in the likelihood of being employed in preferred occupations. However, major gains toward equal opportunity occurred in the 1960 to 1970 decade. While these changes can not be directly linked to federal anti-discrimination legislation and government employment, legal changes likely lessened employers taste for discrimination and encouraged black women workers to enter previously proscribed occupations.

TABLE 1: OCCUPATIONAL SEGREGATION BETWEEN EMPLOYED BLACK AND WHITE WOMEN FOR DETAILED OCCUPATIONS WITHIN MAJOR OCCUPATIONAL GROUPS: SELECTED DATES 1910 to 1970

Occupation Group	Segregation Indexes				
	1910	1930	1950	1960	1970
	- in percents -				
Total	62.7	66.6	60.8	53.2	37.9
White Collar:	15.1	23.7	23.9	20.6	17.0
Professional, technical	5.1	6.3	4.1	3.4	3.5
Managers, officials	1.0	1.2	1.7	1.7	1.1
Sales Workers	3.2	3.9	4.0	5.5	2.8
Clerical and kindred	5.8	12.3	14.1	10.0	9.6
Blue Collar:	13.6	9.0	8.3	6.8	4.0
Craftsmen, foremen	0.9	0.4	0.6	0.4	0.4
Operatives and kindred	12.0	7.9	7.2	6.1	3.2
Laborers, exc. farm, mine	0.7	0.7	0.5	0.3	0.4
Service Workers:	17.6	22.7	25.2	24.6	16.3
Private household	14.7	19.8	19.0	17.2	8.7
Service, exc. private	2.9	2.9	6.2	7.4	7.6
Farm Workers:	16.4	11.2	3.3	1.2	0.5
Farmers, farm managers	0.8	1.0	0.6	----	0.1
Farm laborers, foremen	15.5	10.2	2.7	1.2	0.4

Note: Indexes are computed on 292 detailed occupations using data from decennial census reports. The indexes may be read as percentages and interpreted as the percent of black women who would have to change occupations to equal the occupational distribution of white women.

TABLE 2: SOURCES OF CHANGE IN SEGREGATION INDEXES BETWEEN EMPLOYED BLACK AND WHITE WOMEN, 1910-1970

Period	Actual Change	Mix Effects	Composition Effects	Interaction Effects
1910-1930	-0.5	-3.3	+8.0	-5.2
1930-1950	-8.3	-9.8	+9.9	-8.4
1950-1970	-23.7	-8.9	-15.1	+0.3
1950-1960	-5.7	-0.9	-5.2	+0.4
1960-1970	-18.0	-7.6	-9.9	-0.5

Source: Derived from U.S. Bureau of the Census, 1933: Table 3; 1943: Table 15; 1956: Table 3; 1963: Table 3; 1973: Table 39.

Note: Computations are based on employed women in major occupational categories, excluding those with occupation not reported.

TABLE 3: DISTRIBUTION OF EMPLOYED BLACK AND WHITE WOMEN BY RACIAL COMPOSITION OF OCCUPATIONAL CATEGORY IN 1910: 1910-1970

	Racial Composition Category (Black Women as a Percent of Total Women in Occupation in 1910)					
	0-4.9	5-9.9	10-14.9	15-39.9	40-100	Total
	(in percents)					
1910						
White	60.2	2.4	9.7	1.5	26.2	100.0
Black	6.5	0.5	4.0	1.0	88.1	100.0
Total	48.4	2.0	8.5	1.4	39.8	100.0
1930						
White	70.1	3.2	9.6	1.4	15.7	100.0
Black	11.4	0.6	10.1	1.8	76.2	100.0
Total	59.9	2.7	9.7	1.5	26.2	100.0
1950						
White	75.9	4.8	11.5	0.7	7.1	100.0
Black	26.2	1.4	19.2	1.5	51.7	100.0
Total	66.7	4.4	12.4	0.8	12.5	100.0
1960						
White	76.2	4.3	13.2	0.5	5.9	100.0
Black	32.1	1.1	23.2	1.1	42.6	100.0
Total	71.2	3.9	14.3	0.6	10.1	100.0
1970						
White	77.3	4.0	15.0	0.9	2.8	100.0
Black	53.1	1.5	25.5	1.5	18.5	100.0
Total	74.6	3.8	16.2	1.0	4.5	100.0

TABLE 4. THE DEMAND FOR AND SUPPLY OF EDUCATED FEMALE WORKERS, 1940 to 1970

	1940	1950	1960	1970
Demand - number of employed female professional and clerical workers with 12 years or more education	3,044,360	5,201270	7,480,661	12,925,725
Demand for better educated females[a] as a ratio of supply in different age, marital status, and color groups:				
Women 18-34 years old				
(1)Single, widowed, divorced and married (husband absent)				
White.....	0.81	1.60	2.38	2.13
Total (White + Nonwhite)..	0.78	1.48	2.09	1.86
(2)Single, widowed, divorced, married (husband absent) and married (husband present) with no children under age 6				
White.....	--[b]	--[b]	1.38	1.28
Total (White + Nonwhite)..	--[b]	--[b]	1.24	1.15
Women 18-64 years old				
(3)Single, widowed, divorced and married (husband absent)				
White.....	0.59	0.97	1.29	1.03
Total (White + Nonwhite)..	0.56	0.89	1.15	0.94
(4)Single, widowed, divorced, married (husband absent) and married (husband present) with no children under age 6				
White.....	--[b]	--[b]	0.47	0.51
Total (White + Nonwhite)..	--[b]	--[b]	0.44	0.47

[a]Better educated females are those women with at least four years of high school

[b]Not available.

TABLE 5: EDUCATED WOMEN 14 YEARS OF AGE AND OLDER IN PROFESSIONAL AND CLERICAL EMPLOYMENT BY COLOR, 1940-1970

	1940	1950	1960	1970
Total employed (in thousands)				
White	9,447	13,323	18,385	25,977
Nonwhite	1,538	1,863	2,607	3,355
Percent of employed women with 12 or more years education				
White	48.1	54.2	58.5	67.1
Nonwhite	12.8	21.8	34.9	47.8
White-Nonwhite difference	35.3	32.4	23.6	19.3
Percent of employed women with 12 or more years education in professional and clerical occupations.				
White	65.4	67.2	66.0	67.1
Nonwhite	35.6	38.8	41.0	54.3
White-Nonwhite difference	29.8	28.4	25.0	12.8

Notes: Data for 1940, 1950, and 1970 refer to the employed; data for 1960 refer to the experienced civilian labor force. Data for 1970 are by race rather than by color. As other nonwhite women are more likely to hold preferred occupations than black women, the improvement in rate of minority employment in preferred occupations is underestimated.

Source: U.S. Bureau of the Census, 1943: Table 3; 1953: Table 11; 1963: Table 8; 1973: Table 11.

TABLE 6: GOVERNMENT EMPLOYMENT OF WOMEN IN CLERICAL OCCUPATIONS BY COLOR, 1940-1970

	1940	1950	1960	1970
Total employed in clerical work		- in thousands -		
White	2,386	4,188	6,049	9,459
Nonwhite	16	85	227	691
Total	2,402	4,273	6,275	10,150
Number of clerical workers employed by government				
White	318	653	973	1,763
Nonwhite	4	37	94	269
Total	322	690	1,066	2,032
Percent of clerical workers employed by government		- in percents -		
White	13.3	15.6	16.1	18.6
Nonwhite	25.1	43.5	41.3	39.0
Total	13.4	16.2	17.0	20.0
Percent of all workers employed by government				
White	13.0	13.4	15.1	18.9
Nonwhite	5.0	9.3	14.0	24.4
Total	11.9	12.9	15.0	19.5

Note: In 1970, nonwhite includes only blacks.

Source: U.S. Bureau of the Census, 1943: Table 6; 1956: Tables 12 and 13; 1963: Tables 21 and 22; 1973: Tables 43 and 44.

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